

Claims

- [c1] A step assembly that occupies a relatively small space when in a storage configuration but which provides a full-size step when in a fully deployed configuration, comprising:
- a back wall adapted to be mounted in a vertical plane to a support surface;
 - a first back rod and a second back rod pivotally secured at their respective rearward ends to said back wall at laterally spaced apart opposite ends thereof for movement in a horizontal plane;
 - a front wall disposed in a vertical plane;
 - a first front rod and a second front rod pivotally secured at their respective forward ends to said front wall at laterally spaced apart opposite ends thereof for movement in a horizontal plane;
 - said first back rod and said first front rod being pivotally connected to one another at their respective forward and rearward ends for pivotal movement in a horizontal plane and in a vertical plane;
 - said second back rod and said second front rod being pivotally connected to one another at their respective forward and rearward ends for pivotal movement in a

horizontal plane and in a vertical plane;
said back wall and said front wall being disposed in
closely spaced relation to one another when said step
assembly is in said stored configuration;
said first back rod and said first front rod being disposed
in parallel, abutting relation to one another and in paral-
lel relation to said back and front walls when said step
assembly is in said stored configuration;
said second back rod and said second front rod being
disposed in parallel, abutting relation to one another and
in parallel relation to said back and front walls when said
step assembly is in said stored configuration;
said first back rod and said first front rod being disposed
in perpendicular relation to said back and front walls
when said step assembly is in a fully extended configu-
ration;
said second back rod and said second front rod being
disposed in perpendicular relation to said back and front
walls when said step assembly is in said fully extended
configuration;
said first back rod and said first front rod being disposed
in parallel relation to said second back rod and said sec-
ond front rod when said step assembly is in said fully
extended position; and
said first front rod and said second front rod being dis-
posed in perpendicular relation to said first back rod and

said second back rod when said front wall is fully deployed in a horizontal plane to provide a step.

[c2] The step assembly of claim 1, further comprising:
a first clevis fixedly secured to a first end of said back wall and a second clevis fixedly secured to a second end of said back wall;
said first back rod having a rearward end pivotally mounted to said first clevis for movement in a horizontal plane and said second back rod having a rearward end pivotally mounted to said second clevis for movement in a horizontal plane.

[c3] The step assembly of claim 2, further comprising:
a first clevis fixedly secured to a first end of said front wall and a second clevis fixedly secured to a second end of said front wall;
said first front rod having a forward end pivotally mounted to said first clevis for movement in a horizontal plane and said second front rod having a forward end pivotally mounted to said second clevis for movement in a horizontal plane.

[c4] The step assembly of claim 1, further comprising:
a first horizontal pivot block secured to said forward end of said first back rod;
a second horizontal pivot block secured to said forward

end of said second back rod;
a first vertical pivot block secured to said rearward end of said first front rod;
a second vertical pivot block secured to said rearward end of said second front rod;
said first horizontal pivot block and said first vertical pivot block being pivotally connected to one another so that said first vertical pivot block may rotate in a vertical plane relative to said first horizontal pivot block; and
said second horizontal pivot block and said second vertical pivot block being pivotally connected to one another so that said second vertical pivot block may rotate in a vertical plane relative to said second horizontal pivot block.

[c5] The step assembly of claim, further comprising:
said first horizontal pivot block being disposed in abutting, lateral relation to said first vertical pivot block; and
said second horizontal pivot block being disposed in abutting, lateral relation to said second vertical pivot block.